

ABSTRACT

A miter saw design with a cutting arm pivot mechanism that allows the pivot point of the cutting arc to move in a predetermined path in the plane described by the rotating cutting surface. The “floating pivot” enables the tool to accommodate larger pieces of material than conventional
5 miter saws with the same diameter cutting blade. This design also allows the saw to be more compact, lighter in weight, and less complex in comparison to the sliding miter saw. Thus, a miter saw can be provided that provides the cutting capacity of a larger saw with less weight, bulk, and cost than the current alternatives.